Application No. 10/088,193

AMENDMENTS TO THE CLAIMS

Claims 1-13 (Cancelled)

14. (Currently amended)   Method for detecting and evaluating the conditions of vehicle movement dynamics for a motor vehicle by means of a wheel force sensor, which operates across a preadjusted air slot and senses a rotating encoder attached to the vehicle tire or wheel, comprising the steps of:

    a)   operating the sensor under known conditions that result in minimal lateral forces exerted upon the rotating encoder,

    b)   measuring a signal generated by the sensor under the conditions of step a) and using that measured signal as a reference value by which to determine the presence of a transverse force on the wheel,

    c)   standardizing the measured signal to at least one nominal value when a driving behavior is stationary.

15.   Cancelled.

16. (Previously presented)   Method as claimed in claim 14, wherein the signal is a sinusoidal alternating voltage or alternating current signal, and the nominal value is determined with each peak value of the half wave (amplitude) or with each alternation of a pole or marking of the encoder.

17. (Previously presented)   Method as claimed in claim 14, wherein a value is associated with the nominal value which reproduces a zero point (offset) of the transverse force acting on the wheel or the tire.

18. (Previously presented)   Method as claimed in claim 17, wherein the transverse forces are determined in dependence on the amplitude variations according to the relation

$$Amp_{usefuleffect} = \frac{Amp}{Amp_{nominalvalue}}$$

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wherein Amp = output signal (amplitude), $Amp_{nominal\ value}$ = standardized output signal (nominal value), $Amp_{usefuleffect}$ = ratio between the amplitude and the standardized nominal amplitude.

19. (Previously presented)   Method as claimed in claim 18, wherein the amplitude variations are attributed by means of the inverse function to changes in distance according to the relation

$$Dis_{usefuleffect} = k * \ln\left(\frac{Amp}{Amp_{no\,min\,alvalue}}\right)$$

wherein $Dis_{useful\ effect}$ = changes in distance and k = negative constant.

20. (Previously presented)   Method as claimed in claim 18, wherein the transverse forces are basically determined as a function of the changes in distance.

21. (Previously presented)   Method as claimed in claim 16, wherein the nominal value is maintained until the predetermined driving behavior is detected.

22. (Currently amended)   Control circuit for detecting and evaluating the conditions of vehicle movement dynamics for a motor vehicle by means of wheel force sensors, which take the preadjusted air gap between at least one rotating encoder and at least one pick-up for measuring data into account as a standard for the transverse forces that act on the wheel or on the tire, comprising:

a determination unit which sets an operating point of the output signal of the pick-up irrespective of the air gap,

means for standardizing the output signal to at least one nominal value when a vehicle movement behavior is stationary.

23.   Cancelled.

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24.(Previously presented)   Control circuit as claimed in claim 22, wherein the output signal of the pick-up for measuring data or the signal-evaluating device is a sinusoidal alternating voltage or alternating current signal, and the determination unit determines the nominal value with each peak value of the half wave (amplitude) or with each alternation of the poles or markings of the encoder.

25. (Previously presented)   Control circuit as claimed in claim 24, further comprising means attributing a value to the nominal value which represents the zero point (offset) of the transverse force, and in that the determination unit determines transverse forces in dependence on the amplitude variations according to the relation

$$Amp_{usefulefffect} = \frac{Amp}{Amp_{no\,min\,alvalue}}$$

wherein Amp = output signal (amplitude), $Amp_{nominal\ value}$ = standardized output signal (nominal value), $Amp_{usefuleffect}$ = ratio between the amplitude and the standardized nominal amplitude.

26. (Previously presented) Control circuit as claimed in claim 25, wherein the determination unit attributes the amplitude variations by means of an inverse function to changes in distance according to the relation

$$Dis_{usefuleffect} = k * \ln\left(\frac{Amp}{Amp_{no\,min\,alvalue}}\right)$$

wherein $Dis_{useful\ effect}$ = changes in distance and k = negative constant.

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